UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,332	03/09/2000	Tal Lavian	10360-052001	3280

34845 7590 01/17/2007

McGUINNESS & MANARAS LLP
125 NAGOG PARK
ACTON, MA 01720

EXAMINER	
BOUTAH, ALINA A	
ART UNIT	PAPER NUMBER
2143	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/522,332	LAVIAN ET AL.	
	Examiner	Art Unit	
	Alina N Boutah	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2006* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-11 and 13-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-11 and 13-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

This action is in response to Applicant's response received October 5, 2006. Claims 1-7 and 9-11, 13-34 are pending in the present application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 6, 2006 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 8-15, 20-26 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,655,081 issued to Bonnell et al (hereby referred to as Bonnell) in view of USPN 5,958,010 issued to Agarwal et al. (hereby referred to as Agarwal).

Regarding claim 1, Bonnell teaches a system for managing network resources comprising:

a network management server configured to execute a network management application which causes the network management server to perform network management instructions including,

sending one or more network commands to one or more network devices connected to the network causing reconfiguration of how one or more network devices process network traffic (abstract; figures 2 and 25; col. 2, lines 48-51; col. 7, lines 32-44),

receiving one or more status packets from the one or more network devices in response to the one or more network commands (col. 2, lines 48-51), and

performing an analysis of use of network resources on the one or more network devices connected to a network using the one or more status packets (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14),

the network management server further configured to request that a network device load the network management application, the network device being among the one or more network devices (col. 7, lines 14-21); and

a network device configured to download the network management application and execute the network management application which causes the network device to perform the network management instructions including,

reconfiguring how network traffic is processed by the network device (figure 25; col. 7, lines 32-44),

sending one or more second network commands to one of the one or more network devices (col. 2, lines 48-51; col. 15, line 65- col. 16, line 2),

receiving one or more second status packets from one of the one or more network devices in response to the one or more second network commands (col. 2, lines 48-51),

performing an analysis of use of network resources on the one or more network devices connected to a network using the one or more second status packets (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14), and

sending results of the analysis to the network management server for use in management of the network (Abstract; col. 7, lines 32-44).

Although Bonnell does not explicitly disclose sending second network commands and receiving second status packets from the one or more network devices, he teaches the network device being able to transmit second requests to at least one agent system. This would have been obvious to one of ordinary skill in the art at the time the invention was made that the process of sending and receiving the second network command and status is similar to that of the first network command and status.

Bonnell does not explicitly teach the network device having a loop back address and the received network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address.

Agarwal teaches a network device having a loop back address and a network management application having instructions for accessing local storage and resources using a

local network protocol stack and local network protocol parameters via the loop back address (abstract; figure 3; col. 4, lines 27-35; and col. 6, lines 31-39).

At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a loop back address because by definition, loopback interface has no hardware associated with it, and it is not physically connected to a network, therefore it allows administrators to test IP software without worrying about broken or corrupted drivers or hardware

Regarding claim 2, Bonnell teaches the system in claim 1 wherein the network management application includes network management instructions compatible with a network management protocol (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 3, Bonnell teaches the system in claim 2 wherein the network management protocol includes the simple network management protocol (SNMP) (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 9, Bonnell teaches the system in claim 1 further comprising an application server device connected to the network and used to store one or more network management applications downloadable onto the network device (Abstract; figure 19, col. 8, lines 47-49).

Regarding claim 10, Bonnell teaches the system in claim 1 wherein the network management application network management instructions that monitors a network parameter associated with the network and notifies the network management server when the network parameter reaches a threshold level (col. 13, lines 55-62; col. 17, lines 18-20).

Regarding claim 11, Bonnell teaches a computer-implemented method of distributing management of network resource on a network to network devices exchanging information over the network, comprising:

executing a network management application through a network management sever to perform network management instructions including an analysis of use of network resources on one or more network devices connected to a network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

receiving a request on a network device among the one or more network devices to execute the network management application including reconfiguring how one or more of the network devices processes network traffic and performing an analysis of use of network resources on one or more other network devices connected to the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14; col. 16, line 3-5; figure 25);

receiving the network management application over the network wherein the network management application includes the network management instructions for reconfiguring the network device and performing the analysis (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14 figure 25);

reconfiguring how the network device processes traffic (figure 25; col. 7, lines 32-44);

processing the network management instructions on the network device that requests network parameters from a remote network device, the remote network device being among the one or more other network devices, the network management instructions including (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

transmitting the request for the network parameter over the network to the remote network (col. 7, lines 14-31); and

receiving the requested network parameter over the network from the remote network device (col. 7, lines 14-21);

processing the network management instructions including performing the analysis on the network device using the network parameter (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14); and

providing results of the analysis to the network server in response to the request to execute the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14).

Bonnell does not explicitly teach the network device having a loop back address and the received network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address.

Agarwal teaches a network device having a loop back address and a network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address (abstract; figure 3; col. 4, lines 27-35; and col. 6, lines 31-39).

At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a loop back address because by definition, loop back interface has no hardware associated with it, and it is not physically connected to a network, therefore it allows administrators to test IP software without worrying about broken or corrupted drivers or hardware.

Regarding claim 13, Bonnell teaches the method in claim 11 wherein providing results further comprises notifying the network management server when the network parameter reaches a threshold level (col. 13, lines 55-62; col. 17, lines 18-20).

Regarding claim 14, Bonnell teaches the method in claim 11 wherein the network management application includes network management instructions compatible with a network management protocol (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 15, Bonnell teaches the method in claim 14 wherein the network management protocol includes the simple network management protocol (SNMP) (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 20, Bonnell teaches the method in claim 11, wherein the processor on the network device executes a network management instruction that analyzes the utilization of network resources on one or more network devices connected to the network (col. 6, lines 61-67 – col. 7, lines 1-14).

Regarding claim 21, Bonnell teaches the method in claim 11, further comprising an application server device connected to the network, the application server device being used to store one or more network management applications that are downloadable onto the network device (Abstract; figure 19, col. 8, lines 47-49).

Regarding claim 22, Bonnell teaches an apparatus for distributing network management of a network-to-network devices comprising: a network management server configured to execute a network management application which causes the network management server to perform network management instructions including,

sending one or more network commands to one or more network devices connected to a network (figure 2; col. 2, lines 48-51),

receiving one or more status packet from the one or more network devices in response to the one or more network commands (col. 2, lines 48-51), and

performing an analysis of use of network resources on the one or more network devices connected to a network using the one or more status packets (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14),

the network management server further configured to request that a network device load the network management application, the network device being among the one or more network devices (col. 7, lines 14-21); and

a memory containing instructions when executed cause the processor to receive a request on a network device to execute the network management application that performs the network management instructions,

receive the network management application over the network on the network device wherein the network management application has the instructions for performing the network management instructions including, reconfiguring how the network devices processes network traffic (figure 25),

requesting network parameters from a remote network device, the remote network device being among the one or more network devices (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14),

transmitting the request for the network parameter over the network to the remote network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14),

receiving the requested network parameter over the network from the remote network device (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14; col. 6, lines 61-67 – col. 7, lines 1-31; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

processing the instruction for performing the analysis on the remote network device using the network parameter; and providing results of the analysis to the network management server in response to the request to execute the network management instructions (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14; col. 6, lines 61-67 – col. 7, lines 1-31; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

and although Bonnell et al. do not expressly teach a processor, some kind of processor must inherently be part of a network device in order to perform the mentioned task.

Bonnell does not explicitly teach the network device having a loop back address and the received network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address.

Agarwal teaches a network device having a loop back address and a network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address (abstract; figure 3; col. 4, lines 27-35; and col. 6, lines 31-39).

At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a loop back address because by definition, loopback interface has no hardware associated with it, and it is not physically connected to a network, therefore it allows administrators to test IP software without worrying about broken or corrupted drivers or hardware

Regarding claim 23, Bonnell teaches the apparatus of claim 22 wherein the memory contains additional instructions for execution on the processor that continue processing network management instructions on the network device using the network parameter (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10); and providing results of the analysis in response to the request to execute the task (col. 7, lines 7-14; col. 8, lines 63-67).

Regarding claim 24, Bonnell teaches the apparatus of claim 22 wherein the memory contains additional instructions for execution on the processor and providing results of the analysis that further notify the network management server when the network parameter reaches a threshold level (col. 13, lines 55-62; col. 17, lines 18-20).

Regarding claim 25, Bonnell teaches the apparatus of claim 22 wherein the processor executes network management instructions compatible with a network management protocol (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 26, Bonnell et al. teach the apparatus of claim 25 wherein the network management protocol includes the simple network management protocol (SNMP) (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding 31, Bonnell et al. teach an apparatus for distributing network management of a network to network devices exchanging information over the network comprising:

means for executing a network management application through a network management server to perform network management instructions including an analysis of use of network resources on one or more network devices connected to a network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

means for receiving a request on a network device among the one or more other network devices to execute the network management application including reconfiguring how the network devices processes network traffic and performing an analysis of use of network resources on one or more other network devices connected to the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14; figure 25);

means for receiving the network management application at the network device over the network wherein the network management application includes the network management

instructions operations for performing the analysis (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

means for processing the network management instructions on the network device that requests network parameters from a remote network device, the remote network being among the one or more other network devices, the network management instructions including (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

means for transmitting the request for the network parameter over the network to the remote network (col. 7, lines 14-31);

means for receiving the requested network parameter from the remote network device over the network (col. 7, lines 14-21);

means for processing the network management instructions including reconfiguring how the network devices processes network traffic and performing the analysis on the network device using the network parameter; and means for providing results of the analysis to the network management server in response to the request to execute the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14).

Bonnell does not explicitly teach the network device having a loop back address and the received network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address.

Agarwal teaches a network device having a loop back address and a network management application having instructions for accessing local storage and resources using a

local network protocol stack and local network protocol parameters via the loop back address (abstract; figure 3; col. 4, lines 27-35; and col. 6, lines 31-39).

At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a loop back address because by definition, loopback interface has no hardware associated with it, and it is not physically connected to a network, therefore it allows administrators to test IP software without worrying about broken or corrupted drivers or hardware

Regarding claim 32, Bonnell et al. teach a computer program product, for distributing network management of a network to network devices exchanging information over the network, the product comprising program code instructions to cause a processor to:

execute a network management application through a network management server to perform network management instructions including an analysis of use of network resources on one or more network devices connected to a network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

receive a request on a network device among the one or more other network devices to execute the network management application including reconfiguring how the network devices processes network traffic and performing an analysis of use of network resources on one or more other network devices connected to the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

receive the network management application at the network device over the network wherein the network management application includes the network management instructions operations for performing the analysis (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

process the network management instructions on the network device that requests network parameters from a remote network device, the remote network being among the one or more other network devices, the network management instructions including (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

transmit the request for the network parameter over the network to the remote network (col. 7, lines 14-31);

and receive from the remote network device the requested network parameter over the network (col. 7, lines 14-21);

process the network management instructions including reconfiguring how the network devices processes network traffic and performing the analysis on the network device using the network parameter (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14); and

provide results of the analysis to the network management server in response to the request to execute the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14).

Bonnell does not explicitly teach the network device having a loop back address and the received network management application having instructions for accessing local storage and resources using a local network protocol stack and local network protocol parameters via the loop back address.

Agarwal teaches a network device having a loop back address and a network management application having instructions for accessing local storage and resources using a

local network protocol stack and local network protocol parameters via the loop back address (abstract; figure 3; col. 4, lines 27-35; and col. 6, lines 31-39).

At the time the invention was made, one of ordinary skill in the art would have been motivated to employ a loop back address because by definition, loopback interface has no hardware associated with it, and it is not physically connected to a network, therefore it allows administrators to test IP software without worrying about broken or corrupted drivers or hardware.

Regarding claims 33 and 34, Bonnell teaches the system in claim 1 and the method in claim 11, wherein the network device performing an analysis of use of network resources on the one or more network devices connected to a network reduces processing load on the network management server and frees up the network management server to perform tasks other than performing an analysis of use of network resources (col. 7, line 22-31).

Claims 4-7, 16-19, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnell in view of *Infrastructure for Advanced Network Management based on Mobile Code* by Susilo et al.

Regarding claims 4, 16, and 27, Bonnell fails to teach the system (in claim 1), the method (in claim 11), and the apparatus of (claim 22), respectively, wherein the network management application includes network management instructions compatible with an object-oriented programming language. Susilo et al. teach a use of mobile agents performing tasks for network

management wherein the task includes operations compatible with an object-oriented programming language (Abstract; Requirements 1 and 2, page 324, 3rd paragraph, and page 325, 1st paragraph; Security, the entire page 328). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the task to include operations compatible with an object-oriented programming language because it provides security and portability that are necessary for secure task distribution (Abstract; Security, the entire page 328; Summary, page 332, 1st paragraph).

Regarding claim 5, the system in claim 1, wherein the network management application includes network management instructions compatible with byte-codes executable on a virtual machine.

Regarding claims 5, 17, and 28, Bonnell et al. fail to teach the system (in claim 1), the method (in claim 11), and the apparatus of (claim 22), respectively, wherein the network management application includes network management instructions compatible with byte-codes executable on a virtual machine (Requirement 1, page 324, 3rd paragraph; Requirements 2, page 325, 1st paragraph; entire page 326). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the task to include operations compatible with byte-code executable on a virtual machine to allow the implementation of applications that run on many different platforms, thus enhancing the system's robustness (Requirement 1, page 324, 3rd paragraph).

Regarding claims 6, 18, and 29, Bonnell et al. fail to teach the system (in claim 5), the method (in claim 19), and the apparatus of (claim 28), respectively, wherein the virtual machine is compatible with the Java Virtual Machine. Susilo et al. teach the virtual machine being compatible with Java Virtual Machine (Requirement 1, page 324, 3rd paragraph; Requirements 2, page 325, 1st paragraph; entire page 326). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to employ a virtual machine that is compatible with Java Virtual machine because it allows the implementation of applications that run on many different platforms, thus enhancing the system's robustness (Requirement 1, page 324, 3rd paragraph).

Regarding claims 7, 19, and 30, Bonnell et al. fail to teach the system (in claim 1), the method (in claim 11), and the apparatus of (claim 22), respectively, wherein the network management application includes network management instructions compatible with the Java object-oriented programming language. Susilo et al. teach a use of mobile agents performing task for network management wherein the task includes operations compatible with the Java object-oriented programming language (Abstract; Requirements 1 and 2, page 324, 3rd paragraph, and page 325, 1st paragraph; Security, the entire page 328). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the task to include operations compatible with Java object-oriented programming language because Java provides security and portability that are necessary for secure task distribution (Abstract; Security, the entire page 328; Summary, page 332, 1st paragraph).

Response to Arguments

In response to Applicant's argument that there is no teaching or suggestion in Agarwal that a network management application utilize a loop back address to access local storage and resources as claimed, the PTO respectfully submits that this is being taught in cited areas as specified in the previous Office Action. For example, col. 4, lines 27-35; and col. 6, lines 31-39 discloses the use of loopback which occurs when a server and a distributed application are located in the same client. Loop back information passes between the server and the application via the communication stack without ever going out onto the network. Regardless of whether Agarwal teaches a passive or an active use, the end result is still substantially the same as applicant's claimed invention.

Conclusion

This is a continuation application. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N. Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANB

ANB

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100